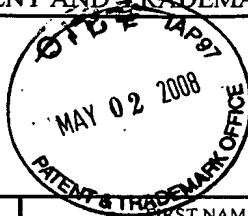




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UNITED STATES PATENT AND TRADEMARK OFFICE



Final/N. Appeal Due: 6-18-0

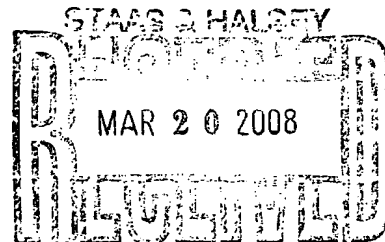
UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/616,631	12/27/2006	Seiji Hachisuka	1720.1003D2	2853
21171 7590 03/18/2008 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
EXAMINER NATALINI, JEFF WILLIAM				
ART UNIT		PAPER NUMBER		
2831				
MAIL DATE		DELIVERY MODE		
03/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

COPIES OF REFERENCES ORDERED





# Office Action Summary

Application No.

11/616,631

Applicant(s)

HACHISUKA ET AL.

Examiner

JEFF NATALINI

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/8/08, 11/1/07, and 10/12/07</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (4985819) in view of Ribarich et al. (20020158591).

Mori et al. discloses a device comprising:

(claims 1-6) an anomaly detection circuit that detects anomaly caused by disconnection discharge in circuit wiring of said inverter (inverter- figures 4 and 5- element 5; col 4 line 20-23 discloses determining faults in the wiring of the inverter, see also col 4 lines 47-55)

(claims 1-6) wherein said anomaly detection circuit includes a current detection part provided at a DC input side of said inverter (see figures 4 and 5, element 17 labeled in 5), wherein said current detection part detects magnetic flux change which occurs in the circuit wiring of the inverter at the DC side of said inverter (see figures 4 and 5, left/DC side of inverter) and detects change in a circuit current of said inverter due to said discharge through the medium of the detected magnetic flux change (col 4 line 24-55)

(claim 6) wherein said current detection part includes a detecting conductor (figure 4 and 5- element 14) that is arranged in the vicinity of said circuit wiring and is on

a circuit board (element 14 show the board hook up as it is attached to the other circuitry/wiring), and detects the magnetic flux change by said detecting conductor (col 4 line 26-36).

Mori et al. lacks specifically wherein

(claims 1-6) a control part that stops an operation of said inverter when an anomaly detection circuit detects an anomaly.

(claim 2) a display driving part that generates a display driving output representative of the anomaly when the anomaly is detected and an indicator that displays behavioral anomaly by the display driving output,

(claim 4) a fluorescent light tube including an inverter

Ribarich discloses in a fluorescent ballast,

(claims 1-6) a control part that stops an operation of said inverter when a fault/anomaly is detected (figure 1, microprocessor element 22; page 2 paragraphs 22-24)

(claim 2) a display driving part that generates a display driving output representative of the anomaly when the anomaly is detected (figure 1 pc/user interface shown under 10 and connected to label 20) and an indicator that displays behavioral anomaly by the display driving output (figure 1 element 10; page 2 paragraph 28)

(claim 4) a fluorescent light tube (figure 1 element 26 – abstract/title) including an inverter (figure 1 element 18).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Mori et al. to include a control part to stop operation of the

inverter/lamp when a fault was detected as well as having a display and a lamp as taught by Ribarich in order to not waste electricity when there is a fault in the system which also will allow safety if the inverter or bulb needs to be fixed or replaced (page 2 paragraph 24).

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-5 (and also the statement about new claim 6) have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFF NATALINI whose telephone number is (571)272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diego Gutierrez/  
Supervisory Patent Examiner, Art Unit 2831

Jeff Natalini



Sheet 1 of 1

FORM PTO-1449  <b>U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	ATTORNEY DOCKET NO. 1720.1003D2	APPLICATION NO. 11/616,631
	FIRST NAMED INVENTOR Seiji HACHISUKA et al.	
	FILING DATE December 27, 2006	GROUP ART UNIT 2858

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
/JN/	AA	4,985,819	01/1991	Mori et al.			
	AB						
	AC						
	AD						
	AE						
	AF						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NO.	DATE	COUNTRY	TRANSLATION YES NO		ABSTRACT
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

**OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)**

				TRANSLATION YES NO	
	AM				

EXAMINER /Jeff Natalini/	DATE CONSIDERED 03/11/2008
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



## ATTACHMENT 1(g)

<b>LIST OF ADDITIONAL SUBMITTED DOCUMENTS</b>	ATTORNEY DOCKET NO.	APPLICATION NO.
	1720.1003D2	11/616,631
	FIRST NAMED INVENTOR	
	Seiji HACHISUKA et al.	
	FILING DATE	GROUP ART UNIT
	December 27, 2006	2858

The following document(s) is/are listed in accordance with the duty of disclosure provisions of 37 CFR § 1.56, so that the Examiner may consider same should he deem any thereof to be material to examination of the subject application.

It is requested that the Examiner acknowledge his consideration of document(s) below-listed by initialing same in the space provided adjacent each such application and that the Examiner sign and date this form at the bottom thereof to confirm such consideration having been given.

This submission in no way represents an admission that any of the information listed herein constitutes prior art with respect to the subject application; and unless and until such prior art status is established, this submission is not a request that the information presented herein be printed on the face of any patent issuing from the subject application in which this information is being filed.

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA						
	AB						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO	
	AC							
	AD							

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

			TRANSLATION YES NO	
/JN/	AE	United States Patent Office Action, mailed January 3, 2008 and issued in related U.S. Patent Application No. 11/616,623		

EXAMINER /Jeff Natalini/	DATE CONSIDERED 03/11/2008
*EXAMINER: Initial if document considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	





Sheet 1 of 1

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	<b>FIRST NAMED INVENTOR</b> Seiji HACHISUKA et al.	
	<b>FILING DATE</b> December 27, 2006	<b>GROUP/ART UNIT</b> 2858

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
/JN/	AA	5,903,159	05/11/1999	Miyata et al.			
/JN/	AB	6,252,409	06/26/2001	Iijima			
/JN/	AC	7,098,677	08/29/2006	Kazama et al.			
/JN/	AD	2001/0019492	09/06/2001	Burton			
	AE						
	AF						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NO.	DATE	COUNTRY	TRANSLATION YES NO		ABSTRACT
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

**OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)**

		TRANSLATION YES NO	
	AM		

<b>EXAMINER</b>  /Jeff Natalini/	<b>DATE CONSIDERED</b>  03/11/2008
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	AB						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO	
	AC							
	AD							

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

						TRANSLATION YES NO	
/JN/	AE	United States Patent and Trademark Office Action, mailed July 19, 2007 and issued in corresponding U.S. Patent Application No. 11/616,623					

EXAMINER	/Jeff Natalini/	DATE CONSIDERED	03/11/2008
*EXAMINER: Initial if document considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			



Sheet 1 of 1

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	FIRST NAMED INVENTOR	
	Seiji HACHISUKA et al.	
	FILING DATE	GROUP PART UNIT
	December 27, 2006	2858

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
/JN/	AA	5,563,777	10-1996	Miki et al.			
/JN/	AB	5,583,402	12-1996	Moisin et al.			
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	AE						
	AF						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	TRANSLATION YES NO		ABSTRACT
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## FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO	
	AC							
	AD							

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

			TRANSLATION YES NO	
/JN/	AE	Office Action for related Chinese Application No. 03150194X dated June 17, 2005.		X

EXAMINER	/Jeff Natalini/	DATE CONSIDERED	03/11/2008
<b>*EXAMINER:</b> Initial if document considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

<b>Notice of References Cited</b>	Application/Control No. 11/616,631		Applicant(s)/Patent Under Reexamination HACHISUKA ET AL.	
	Examiner JEFF NATALINI		Art Unit 2858	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-4,985,819	01-1991	Mori et al.	363/37
*	B	US-2002/0158591	10-2002	Ribarich et al.	315/291
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**COPIES OF REFERENCES ORDERED**

1720. 100322

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**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.